

Remarks

Reconsideration and reversal of the rejections expressed in the Office Action of May 30, 2006 are respectfully contended in view of the following remarks and the application as amended. The present invention relates to a method and system for preventing wafer breakage during wet processing. A wet processing tank is provided wherein a wafer is to be placed within the wet processing tank. A sensor is provided within the wet processing tank wherein the sensor continuously counts bubbles formed within the wet processing tank in a time interval. The sensor is queried wherein if a bubble count within the time interval exceeds a trigger point, then an alarm is given so that a process lot will not be entered into the wet processing tank.

Claims 1-9 and 19-25 were rejected under 35 U.S.C. §102(b) as being anticipated by Yoshioka et al. (US 2002/0027080 A1). Yoshioka et al. relates to an apparatus suited for forming a plated film in fine trenches and plugs for interconnects, and in the openings of a resist formed in the surface of a substrate such as a semiconductor wafer, and for forming bumps (protruding electrodes) on the surface of a semiconductor wafer. The apparatus includes a substrate holder capable of opening and closing for holding a substrate such that the front surface of the substrate is exposed while the backside and the edge thereof are hermetically sealed; a plating tank accommodating a plating liquid in which an anode is immersed; a diaphragm provided in the plating tank and disposed between the anode and the substrate held by the substrate holder; plating liquid circulating systems for circulating the plating liquid to the respective regions of the plating tank separated by the diaphragm; and a deaerating unit disposed in at least one of the plating liquid circulating systems.

The claims as amended overcome this rejection. Support for such amendments is found at page 4, paragraph 4 of the present application.

Specifically, there is no teaching or suggestion of the incorporation of a protection bath in the reference; indeed, Figure 1 of Yoshioka et al. shows plating tank 311 and recovery tank 316, with such tanks neither disclosed nor contemplated to be within a protection bath. Thus this rejection is overcome.

For all of the above reasons, it is respectfully contended that the solicited claims define patentable subject matter. Reconsideration and reversal of the rejections expressed in the Office Action of May 30, 2006 are respectfully submitted. The Examiner is invited to call the undersigned if any questions arise during the course of reconsideration of this matter.

Respectfully submitted,

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